

AMENDMENT AND PRESENTATION OF CLAIMS

Please replace all prior claims in the present application with the following claims, in which no claim is canceled, amended or newly added.

1. (Previously Presented) A method for supporting telephony services over a data network, the method comprising:

retrieving message waiting indication information from a plurality of voice mail systems designated by a user, wherein each of the message waiting indication information specifies existence, within the respective voice mail system, of a voice mail message for the user;

determining an instant communication client of the user; and

forwarding the message waiting indication information over the data network to the instant communication client for display.

2. (Previously Presented) A method according to claim 1, wherein the instant communication client displays the plurality of message waiting indication information concurrently.

3. (Original) A method according to claim 1, wherein the instant communication client is among a plurality of instant communication clients, the method further comprising:

forwarding the message waiting indication information to one or more of the instant communication clients.

4. (Previously Presented) A method according to claim 1, further comprising:

accessing a user database for a profile of the user, wherein the profile specifies the voice mail systems and the instant communication client for displaying the message waiting indication information.

5. (Original) A method according to claim 4, further comprising:

receiving a request to modify the profile of the user; and

modifying the profile based on the request.

6. (Original) A method according to claim 1, wherein the instant communication client is resident on one of a computer system, a Personal Digital Assistant (PDA), a cellular phone, a gaming console, and a web appliance.

7. (Previously Presented) A method according to claim 1, the method further comprising:

receiving an identifier associated with a called station served by one of the voice mail systems; and

forwarding the identifier to the instant communication client, wherein the instant communication client displays the identifier along with the message waiting indication information.

8. (Original) A method according to claim 7, wherein the identifier is derived from one of a Dialed Number Identification Service (DNIS) number and Automatic Number Identification (ANI).

9. (Original) A method according to claim 1, the method further comprising:

determining whether the instant communication client is available; and
if the instant communication client is not available, storing the message waiting indication
information for later delivery.

10. (Original) A method according to claim 1, the method further comprising:
appending supplemental information including one of time stamp information and
advertisement information to the message waiting indication information.

11. (Previously Presented) A method according to claim 1, the method further comprising:
associating a user with the voice mail systems; and
associating the user with one or more instant communication clients including the instant
communication client.

12. (Previously Presented) A method according to claim 1, the method further comprising:
generating a command message to one of the voice mail systems to activate or deactivate
message waiting indication function of the one voice mail system.

13. (Previously Presented) A method according to claim 1, the method further comprising:
generating a voice mail indicator message to notify a computing system hosting the instant
communication client or an intermediate system, wherein the voice mail indicator
message includes an identification field for the instant communication client and one or
more fields indicating presence of voicemail in the respective voice mail systems.

14. (Previously Presented) A computer-readable medium carrying one or more sequences of one or more instructions for supporting telephony services over a data network, the one or more sequences of one or more instructions including instructions which, when executed by one or more processors, cause the one or more processors to perform the steps of:

retrieving message waiting indication information from a plurality of voice mail systems designated by a user, wherein each of the message waiting indication information specifies existence, within the respective voice mail system, of a voice mail message for the user;

determining an instant communication client of the user; and

forwarding the message waiting indication information over the data network to the instant communication client for display.

15. (Previously Presented) A computer-readable medium according to claim 14, wherein the instant communication client displays the plurality of message waiting indication information concurrently.

16. (Original) A computer-readable medium according to claim 14, wherein the instant communication client is among a plurality of instant communication clients, the computer-readable medium further including instructions for causing the one or more processors to perform the step of:

forwarding the message waiting indication information to one or more of the instant communication clients.

17. (Previously Presented) A computer-readable medium according to claim 14, the computer-readable medium further including instructions for causing the one or more processors to perform the step of:

accessing a user database for a profile of the user, wherein the profile specifies the voice mail systems and the instant communication client for displaying the message waiting indication information.

18. (Original) A computer-readable medium according to claim 17, the computer-readable medium further including instructions for causing the one or more processors to perform the steps of:

receiving a request to modify the profile of the user; and
modifying the profile based on the request.

19. (Original) A computer-readable medium according to claim 14, wherein the instant communication client is resident on one of a computer system, a Personal Digital Assistant (PDA), a cellular phone, a gaming console, and a web appliance.

20. (Previously Presented) A computer-readable medium according to claim 14, the computer-readable medium further including instructions for causing the one or more processors to perform the steps of:

receiving an identifier associated with a called station served by one of the voice mail systems; and

forwarding the identifier to the instant communication client, wherein the instant communication client displays the identifier along with the message waiting indication information.

21. (Original) A computer-readable medium according to claim 20, wherein the identifier is derived from one of a Dialed Number Identification Service (DNIS) number and Automatic Number Identification (ANI).

22. (Original) A computer-readable medium according to claim 14, the computer-readable medium further including instructions for causing the one or more processors to perform the steps of:

determining whether the instant communication client is available; and
if the instant communication client is not available, storing the message waiting indication information for later delivery.

23. (Original) A computer-readable medium according to claim 14, the computer-readable medium further including instructions for causing the one or more processors to perform the step of:

appending supplemental information including one of time stamp information and advertisement information to the message waiting indication information.

24. (Previously Presented) A computer-readable medium according to claim 14, the computer-readable medium further including instructions for causing the one or more processors to perform the steps of:

associating a user with the voice mail systems; and
associating the user with one or more instant communication clients including the instant communication client.

25. (Previously Presented) A computer-readable medium according to claim 14, the computer-readable medium further including instructions for causing the one or more processors to perform the step of:

generating a command message to one of the voice mail systems to activate or deactivate message waiting indication function of the one voice mail system.

26. (Previously Presented) A computer-readable medium according to claim 14, the computer-readable medium further including instructions for causing the one or more processors to perform the step of:

generating a voice mail indicator message to notify a computing system hosting the instant communication client or an intermediate system, wherein the voice mail indicator message includes an identification field for the instant communication client and one or more fields indicating presence of voicemail in the respective voice mail systems.

27. (Previously Presented) A system for supporting telephony services over a data network, the system comprising:

a gateway configured to retrieve message waiting indication information from a plurality of voice mail systems designated by a user, wherein each of the message waiting indication information specifies existence, within the respective voice mail system, of a voice mail

message for the user, the gateway determining an instant communication client of the user; and

a server configured to forward the message waiting indication information over the data network to the instant communication client for display.

28. (Previously Presented) A system according to claim 27, wherein the instant communication client displays the plurality of message waiting indication information concurrently.

29. (Original) A system according to claim 27, wherein the instant communication client is among a plurality of instant communication clients, the message waiting indication information being forwarded to one or more of the instant communication clients.

30. (Previously Presented) A system according to claim 27, further comprising:
a user database for storing a profile of the user, wherein the profile specifies the voice mail systems and the instant communication client for displaying the message waiting indication information.

31. (Original) A system according to claim 30, wherein the server receives a request to modify the profile of the user, and the profile is modified based on the request.

32. (Original) A system according to claim 27, wherein the instant communication client is resident on one of a computer system, a Personal Digital Assistant (PDA), a cellular phone, a gaming console, and a web appliance.

33. (Previously Presented) A system according to claim 27, wherein the gateway receives an identifier associated with a called station served by one of the voice mail systems, the identifier being forwarded to the instant communication client which displays the identifier along with the message waiting indication information.

34. (Original) A system according to claim 33, wherein the identifier is derived from one of a Dialed Number Identification Service (DNIS) number and Automatic Number Identification (ANI).

35. (Original) A system according to claim 27, wherein the gateway determines whether the instant communication client is available, and if the instant communication client is not available, the gateway stores the message waiting indication information for later delivery.

36. (Original) A system according to claim 27, wherein the gateway appends supplemental information including one of time stamp information and advertisement information to the message waiting indication information.

37. (Previously Presented) A system according to claim 27, wherein a user is associated with one or more instant communication clients.

38. (Previously Presented) A system according to claim 27, wherein the gateway is further configured to generate a command message to one of the voice mail systems to activate or deactivate message waiting indication function of the one voice mail system.

39. (Previously Presented) A system according to claim 27, wherein the gateway is further configured to generate a voice mail indicator message to notify a computing system hosting the instant communication client or the server, wherein the voice mail indicator message includes an identification field for the instant communication client and one or more fields indicating presence of voicemail in the respective voice mail systems.

40. (Previously Presented) A method for supporting telephony services over a data network, the method comprising:

aggregating message waiting indication information from a plurality of voice mail systems for notifying a user of presence of a voice mail message resident on any one of the voice mail systems; and

transmitting a notification message over the data network to an instant communication client based upon the aggregated message waiting indication information, wherein the notification message specifies the presence of the voice mail message.

41. (Previously Presented) A server for supporting telephony services over a data network, the method comprising:

means for aggregating message waiting indication information from a plurality of voice mail systems for notifying a user of presence of a voice mail message resident on any one of the voice mail systems; and

means for transmitting a notification message over the data network to an instant communication client based upon the aggregated message waiting indication information, wherein the notification message specifies the presence of the voice mail message.